1. Scope

1.1 This procedure covers quality assessment of a gear manufacturing facility.

2. Referenced Documents

2.1 ISO 9001 Quality Systems- Model for Quality Assurance in Design/Development, Production, Installation, and Servicing.

2.2 AGMA/AWEA 921-A97 Recommended Practices for Design and Specification of Gearboxes for Wind Turbine Generator Systems.

2.3 GEARTECH Specifications:

CK2000	QP2000	Procurement specification
CK5000	QP5000	Quality assessment
CK6000	QP6000	Quality assurance plan
CK7000	QP7000	Manufacturing schedule
CK8000	QP8000	Manufacturing audit

Terminology

3.1 ISO 9001 registration- Gear manufacturer holds a “Certificate of Registration” that certifies the gear manufacturer’s quality assurance system has been assessed and registered by a recognized registrar in accordance with the provisions of ISO 9001.

3.2 Procurement specification- Specification designed and maintained by the purchaser that defines the application, load spectrum, and minimum requirements for design, manufacturing, quality assurance, testing, and gearbox performance (see CK2000 and QP2000).

3.3 Quality assurance plan- Manufacturing specification designed and maintained by the gear manufacturer that defines criteria for monitoring and controlling the manufacturing process (see CK6000 and QP6000).

3.4 Manufacturing schedule- Manufacturing specification designed and maintained by the gear manufacturer that defines the manufacturing sequence and schedules quality assurance tests (see CK7000 and QP7000).

3.5 Quality audit- Systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve requirements of the procurement specification.

3.6 Manufacturing audit- Systematic and independent examination to determine whether manufactured product conforms to the requirements of the procurement specification.

4. Significance and Use

4.1 Quality audit- A quality audit is an excellent oppurtunity for the purchaser and gear manufacturer to reach a common understanding of quality goals. Quality audits can provide assurance that the quality plan, manufacturing schedule, and manufacturing procedures are adequate for achieving quality goals.

4.2 Registrar quality audit- Frequency of quality audits by the registrar range from every six months to every three years. If the registrar identifies serious nonconformities, the manufacturer's certificate can be revoked.

4.3 Internal quality audit- As part of a good quality system, a gear manufacturer should conduct internal audits to evaluate their own quality performance.

4.4 Manufacturing audit- After the quality audit shows the quality plan, manufacturing schedule, and manufacturing procedures are adequate for achieving quality goals, the purchaser may award the contract. Once manufacturing commences, the purchaser should audit manufacturing, inspection, and testing for conformance to the requirements of the procurement specification (see CK8000 and QP8000).